

ABSTRACT

A catalyst composition, a process for producing the composition, and a hydrocarbon conversion process for converting a hydrocarbon stream such as, for example, gasoline, to olefins and C₆ to C₈ aromatic hydrocarbons such as toluene and xylenes are disclosed. The catalyst composition comprises a zeolite, a promoter and optionally a binder. The process for producing the composition comprises the steps: (1) combining a zeolite with a promoter under a condition sufficient to produce a modified zeolite; and (2) steaming the modified zeolite. The hydrocarbon conversion process comprises contacting a hydrocarbon stream with the catalyst composition under a condition sufficient to effect the conversion of a hydrocarbon to an olefin and a C₆ to C₈ aromatic hydrocarbon.